

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A multi-layered Cookware made from a multi-layered composite metal sheet having improved uniform thermal transfer properties, said composite sheet comprising a plurality of roll bonded metal layers including ~~an inner at least one core layer of a metal titanium, titanium alloy, or stainless steel~~ having a coefficient of thermal conductivity lower than immediately adjacent metal layers of pure aluminum or Alclad aluminum bonded on both sides of said core layer whereby said inner core layer retards heat flow in a transverse direction to cause said inner core layer to distribute heat in a lateral direction.
2. (Canceled)
3. (Original) A cooking vessel or griddle plate comprising a multi-layer bonded composite including an inner core layer of titanium or titanium alloy, a layer of pure aluminum or Alclad aluminum bonded to opposed sides of the titanium core layer, a layer of stainless steel bonded to a first of the pure aluminum or Alclad aluminum layers to define a cook surface and a layer of one of an austenitic stainless steel or a ferromagnetic material bonded to a second of the pure aluminum or Alclad aluminum layers to define an outer layer adjacent to a heating source.
4. (Currently Amended) Cookware formed from a multi-layered composite sheet having improved uniform thermal transfer properties, said composite sheet comprising a plurality of roll bonded metal layers including ~~an inner a core layer of a metal selected from the group consisting of titanium, titanium alloy and stainless steel, roll bonded on both sides to immediately adjacent layers of pure aluminum or Alclad aluminum, said core layer having a coefficient of thermal conductivity lower than said immediately adjacent metal aluminum layers whereby said inner core layer retards heat flow in a transverse direction to cause said inner core layer to distribute heat in a lateral direction to provide uniform heating across a cook surface of said cookware.~~

5. (Original) An iron having a sole plate made from a multi-layered composite sheet or plate having improved uniform thermal transfer properties, said composite sheet comprising a plurality of roll bonded metal layers including an inner layer of a metal having a coefficient of thermal conductivity lower than adjacent metal layers whereby said inner layer retards heat flow in a transverse direction to cause said inner layer to distribute heat in a lateral direction.

6. (Currently Amended) A method of making cookware made from a multi-layered composite metal sheet comprising the steps of:

(a) providing a plurality of metal sheets including a core layer comprising at least one sheet selected from the group consisting of titanium, titanium alloy and stainless steel and at least two sheets selected from the group consisting of pure aluminum and Alclad aluminum, wherein one of said metal sheets has a coefficient of thermal conductivity lower than the other metal sheets;

(b) preparing said metal sheets by removing an oxide surface layer from surfaces thereof;

(c) stacking said metal sheets in an ordered array such that adjacent sheets having surfaces prepared from step (b) are facing each other and wherein the metal titanium, titanium alloy or stainless steel sheet having the lower coefficient of thermal conductivity is sandwiched between the pure aluminum or Alclad aluminum sheets and forms an inner a core layer of the ordered array;

(d) heating said ordered array to a rolling temperature; and

(e) rolling said ordered array to a desired thickness to form a roll bonded composite sheet; and

(f) drawing said roll bonded composite to form cookware of a desired configuration.

7. (Currently Amended) The method of claim 6 wherein the metal sheets provided in step (a) include at least are aluminum or two sheets of Alclad aluminum which are stacked in step (c) on opposed sides of said core layer and

~~stainless steel, and wherein the metal sheet of lower thermal conductivity is one of titanium, titanium alloy or stainless steel.~~

8. (Currently Amended) The method of claim 7 wherein the ~~metal of~~ lower thermal conductivity core layer is titanium or titanium alloy.

9. (Currently Amended) The method of claim 8 wherein the ordered array of stacking step (c) comprises: a first layer sheet of stainless steel facing a first layer sheet of pure aluminum or Alclad aluminum, a core layer of titanium or titanium alloy sheet having a first side facing the ~~first layer~~ a first sheet of aluminum or Alclad aluminum, a second layer sheet of pure aluminum or Alclad aluminum facing a second side of the core layer of titanium or titanium alloy, and a second layer sheet of stainless steel facing the second layer sheet of aluminum or Alclad aluminum.

10. (Currently Amended) The method of ~~claim 9~~ claim 6 wherein the heating step (d) comprises heating the ordered array in a furnace or oven containing atmospheric oxygen to the rolling temperature of between 550° to 600°F.

11. (Currently Amended) A method of making the cookware comprising the steps (a)-(e) of claim 6, and further including the step of (f) forming the multi-layered composite sheet into a desired configuration for cookware of claim 10 wherein the rolling step (e) comprises a first rolling reduction of at least 5% to about 10% followed by reheating to about 550°-600°F, rolling a second pass, and thereafter heat treating at about 650°-700°F to improve bonding strength in the multi-layered composite metal sheet.

12. (Original) The method of claim 11, including the step of applying a non-stick layer to a cook surface of the cookware.

13. (New) Cookware made from a bonded metal composite comprising:

(a) a core layer consisting of at least one core layer of a metal selected from the group consisting of stainless steel, titanium and titanium alloy; and

(b) two outer layers consisting of pure aluminum or Alclad aluminum roll bonded on upper and lower sides of said core layer.

14. (New) The cookware of claim 13, further comprising a layer of stainless steel roll bonded to an upper layer of the pure aluminum or Alclad aluminum to define a cook surface of said cookware.

15. (New) The cookware of claim 13, wherein the core layer is stainless steel.

16. (New) The cookware of claim 13, wherein one of the outer layers of pure aluminum or Alclad aluminum opposite a cook surface is anodized for improved scratch resistance and enhanced appearance.

17. (New) The cookware of claim 16, wherein an outer layer forming said cook surface has a non-stick layer applied thereto.

18. (New) The cookware of claim 13, wherein the core layer is one of titanium or titanium alloy.